PROPERTIES

OF

PLANTS AND FLOWERS,

COMPILED BY

THE FLOWER COMMITTEE

OF THE

Massachusetts Porticultural Society,

AND APPROVED BY THE SOCIETY

AS

THE STANDARD FOR JUDGING PLANTS AND FLOWERS.

BOSTON:
PUBLISHED BY THE SOCIETY.
1862.



PROPERTIES

OF

PLANTS AND FLOWERS,

COMPILED BY

THE FLOWER COMMITTEE

OF THE

Massachusetts Yorticultural Society

AND APPROVED BY THE SOCIETY

AS

THE STANDARD FOR JUDGING PLANTS AND FLOWERS.

BOSTON:
PUBLISHED BY THE SOCIETY.
1862.

INTRODUCTION

Int. Flower Committee have been greatly readsted by the general Ignorance of thereas and extellment of what constitutes perfect on in a plant or name. They have therefore, as authorized by the Society.

with the concern of the Publication I committee, bound this book, in the hopes it may gain the attention of sthibitors, and he productive of a vast change in the

At first it will be impossible to bring plants and fowers rigidly up to the standard, but the Committee root in time to be successful, in improvem the class

BOSTON:
H. W DUTTON AND SON, PRINTERS,
TRANSCRIPT OFFICE.

past few years, many prizes and gravation have been averaged which should have been arithmed. This error or laxify has been productive of bad effects, and in the fature no prize or grainity will be awarded to any exhibition not coming up to the standard, or showing decided marks of encellence.

The following rates have mean mainly conspilled from the interface of Florence and Phasts, the contribution of Florence and Phasts, the contribution of Florence and Phasts, the contribution of Florence and Charts, the contribution of the last from matterial for its believes all but leave decimal that has been continued.

For the Player Committee,

SBAAI

INTRODUCTION.

THE Flower Committee have been greatly troubled by the general ignorance of florists and exhibitors of what constitutes perfection in a plant or flower.

They have, therefore, as authorized by the Society, with the consent of the Publication Committee, issued this book, in the hopes it may gain the attention of exhibitors, and be productive of a vast change in the plants and flowers shown at our exhibitions.

At first it will be impossible to bring plants and flowers rigidly up to the standard, but the Committee trust in time to be successful in improving the class of flowers exhibited.

Your Committee are also aware that, during the past few years, many prizes and gratuities have been awarded which should have been withheld. This error or laxity has been productive of bad effects, and in the future no prize or gratuity will be awarded to any exhibition not coming up to the standard, or showing decided marks of excellence.

The following rules have been mainly compiled from Glenny's Properties of Flowers and Plants, the received English authority. Much has been omitted, but it is believed all has been retained which can be useful or important to the American gardener.

For the Flower Committee,

EDWARD S. RAND, JR.,

Chairman.

POT PLANTS.

The great ends to be attained in growing plants in pots, are symmetry of growth, elegance of form, healthy and profuse foliage, and abundance of bloom; and the nearer a plant approaches to possessing all these requisites the nearer it approaches perfection.

The first qualification is health, and freedom from insects and dirt. The second, profusion of foliage. The third, symmetry of growth. The fourth, elegance of form. The fifth, abundance of bloom.

In laying down rules for judging pot plants, so much latitude must be given and allowance made for species and varieties, for different habits of growth and modes of culture, that it is impossible to fix any standard. Each different case has its own rules, and what would in one case be excellence, in another would be deformity. Compliance with the above rules is necessary; departure from them should at once disqualify a plant. Further than this, the Committee must use their best judgment in each particular case. It should, however, be observed that in foliaged plants, so called, bloom is not essential to perfection, which there depends upon variety and brilliancy of marking.

BOUQUETS.

In judging bouquets, attention should first be paid to their composition with reference to grace and elegance; second, to quality of the flowers; third, to contrast of colors.

Size is not a merit in a bouquet; in many cases, as in hand bouquets, which are usually too large, it is a positive defect.

Too many flowers and too little foliage is another common fault.

A compact mass, a mosaic of flowers, seldom fails to be stiff and inelegant. Light feathery sprays of green and drooping vines add much to the effect.

EPACRIS.

The plant should be full foliaged, with deep green leaves, free from dust or scale.

The too rampant growth should be checked, and the pinching have been done so as to cause judicious breaks. Long leafless shoots disqualify a plant.

The bloom should be profuse and large: colors brilliant or pure, according to the variety.

In judging Epacris, the chief attention is to be paid to the form of plant and abundance of bloom.

BEGONIA.

The plant should be so covered with foliage as to hide the root and pot; the leaves should stand up well on stout footstalks, which should not be so long as to give the plant a straggling appearance. The markings of the leaves should be bright, clear and well defined. Blurred irregular colors show want of attention in regulating light and heat. If the plants are shown in bloom, (which is not essential, but where the flowers are large and fine, as in B. grandis, Argentea splendens, &c., is an additional recommendation), the trusses of bloom should stand up well above the foliage. These remarks apply especially to the foliaged Begonias: the other varieties are to be judged by the general rules for Pot Plants.

TROPÆOLUM.

The many new varieties of this plant, originated within the last few years, lead us to suppose it may become a florists' flower. The form should be circular, the petals overlapping so as to form a circle, leaving no space at the base; the colors should be well defined, and markings distinct and bright; the foliage should be round and large; the flower should be on a long footstalk, and stand out well from the foliage. The edges of the petals should be smooth and round; jagged edges are an imperfection.

The double varieties are so irregular as to be worthless; they may be improved. These remarks do not apply to T. tricolorum and kindred varieties, but to T. majus and minus, and their many varieties.

DELPHINIUM.

If single, the sepals to be regularly formed, evenly balanced and well open; the eye to be bright and distinct. The color may be delicate, but must always be clear. Dull and muddy colors are worthless.

If double, the flower should be nearly round, with no visible eye; the petals and sepals regularly disposed and indistinguishable the one from the other.

In every case the flower spike should be straight, and the flowers regularly disposed along its whole length. The longer it is the better.

AQUILEGIA.

The flowers should be large and numerous on the stem; flower stem strong; color bright and distinct, (not splashed); sepals open and fully reflexed, at least two thirds of the flowers fully expanded. Double varieties should show no irregularity.

GLADIOLUS.

The flower-scape should be strong; the flowers evenly grown and disposed on opposite sides of the stem, or entirely on one side, at least four-fifths of the flowers expanded; in no case should a half-expanded or double-stemmed spike be

admitted into a stand. The color must be distinct and the variegations clear; in the larger-flowered varieties, the upper petals will be thrown back, while in the smaller-flowered varieties they will incline forward.

Strong spikes with distinctly marked flowers should have the preference.

DOUBLE ZINNIA ELEGANS.

This new and handsome flower gives promise of soon taking a high station amongst our most popular bedding plants. It grows freely in almost any soil, and blooms in profusion from July till November.

The flower should be round, high in the centre, forming half a ball. The petals should be thick, smooth, broad, and rounded at the ends, and free from notches.

The flower should be supported by a strong footstalk, and be perfectly double, large and imbricated.

The color should be bright and dense,—its want of color, or rather its dinginess, has so far been its greatest fault; but from the bright and varied colors of the single kinds, including scarlet, crimson, purple, pink, yellow and white, a great improvement in this respect may be anticipated.

GLOXINIA.

The plant should be healthy and vigorous, with sufficient foliage to cover the top of the pot. The leaves should be broad, thick and velvety, the lower ones growing in a horizontal manner.

In drooping varieties, the tube of the flower should be broad and stout; the throat should be wide and even; the sepals slightly reflexed, smooth and round at the edges, and of sufficient substance to retain their beauty. The color, if a self, should be bright and distinct; if spotted, splashed or striped, the markings should be very decided and not run

together. The greater the contrast of colors the better, the markings to be regular; the three under-sepals should always be marked alike and of uniform size.

The plant must be a free bloomer, the flowers standing well up above the leaves, and as the front or inside of the flower is the handsomest part, it should be the most conspicuous.

The erect varieties should have a long round tube a little swelled at the middle, the throat to be the same color all round; the sepals the same, and the divisions scarcely perceptible. The mouth of the tube should be perfectly round, and the sepals be blunt and smooth, forming another circle.

CAPE HEATHS.

Few if any rules can be laid down as to the properties of a good Erica. So numerous, so varied, and so beautiful, nature has done so much for this lovely genus, that the labor of the hybridist seems scarcely necessary. We can hardly hope to do much towards improving them, but we may hope to see them grown more frequently, more particularly the slow-growing and choicer varieties. It is a general opinion, though perhaps an erroneous one, that hard-wooded varieties are difficult to manage. They must have their peculiar soil and treatment, and are impatient of any neglect. But their successful cultivation is only a question of time, care and perseverance; as from three to five years are necessary to form moderate-sized specimens.

The size of an Erica should not be considered of much importance, unless plants of the same variety are exhibited, and these otherwise equal; for some kinds—Ardens and Massoni, for instance—at eighteen inches high, would be as fine and creditable specimens as plants three to four feet high of intermedia and Wilmoriana, and other free-growing kinds. The plant should be healthy, furnished

with branches to the pot, and of a neat regular habit. Symmetry of form, with profusion of bloom, is the point we should endeavor to attain.

CINERARIA.

- 1. The petals should be thick, broad, blunt, and smooth at the ends, closely set, and form a circle without much indentation.
- 2. The centre or yellow disk should be less than one third of the diameter of the whole flower; in other words, the colored circle formed by the petals should be wider all round than the disk measured across.
- 3. The color should be brilliant, whether shaded, tipped, or self; or, if it be a white, it should be very pure.
- 4. The trusses of flowers should be large, close, and even on the surface; the individual flowers standing together with their edges touching each other, however numerous they may be.
 - 5. The plant should be dwarf.
- 6. The stems strong, and not longer than the width across the foliage; in other words, from the upper surface of the truss of flower to the leaves, where the stem starts from, should not be a greater distance than from one side of the foliage to the other.
- 7. Tipped flowers will stand first, and the more abrupt and well defined the tip is, the better. The tip should form a dense margin of color, and the more contrasted with the ground the better; bright selfs next; indefinite shades last.

CAMELLIA JAPONICA.

- 1. The flower should be circular on the outside, when looked at in front.
- 2. The petals should be thick, smooth at the edges, broad and blunt outside, cupped or reflexed, as the case may be.

- 3. It should be imbricated, (that is, each petal should have its centre over the join of the under petals); each row of petals should be smaller than the row immediately under it.
- 4. The number of rows one above the other should form the flower into half a globe.
- 5. The color should be alike all over the flower, if a self; and if blotched or striped, the contrast of the two colors should be striking.
- 6. If the flower be white, it should be pure; and if white and colored in mixture, the white should be distinct and the outline of a blotch or stripe, where the white and color join, should be very decided.

CHRYSANTHEMUM.

- 1. The plant should be dwarf, shrubby, well covered with green foliage to the bottom, the leaves broad and bright, the flowers well displayed at the end of each branch, come in abundant quantity, and be well supported by the stems.
- 2. The flower should be round, double, high in the crown, perfect in the centre, without disk or confusion, and of the form of half a ball.
- 3. The individual petals should be thick, smooth, broad, circular at the ends, according with the circle of the flower, the indentations, where they meet, hardly perceptible.
- 4. The petals must not show their under sides by quilling, and should be of such firm texture as will retain them all in their places.

Size of bloom to be large in proportion to the foliage, but the size only to be considered when plants are in all other respects equal.

FUCHSIA.

1. First and foremost it is absolutely necessary that the petals of the inside or corolla be a different color from the

outside, for contrast is essential; those, therefore, which are all of a color are comparatively worthless.

- 2. The brighter the scarlet outside, and the deeper the purple inside, the better the flower. The loss of the rich purple is fatal, therefore, to the Scarlet Fuchsia. But a Fuchsia may be white outside, and in that case a bright scarlet corolla would be a good contrast, though a purple would be better.
- 3. The form of the buds or drops, before they open, cannot be too round, because that form is the most beautiful before opening, and gives the widest sepals when open.
- 4. The footstalks of the flower should be long enough to let the bloom fall beneath the leaves, and not long enough to let them hang into the branch below them, for the flowers should all hang free of the foliage. The corolla or purple should be large and close, and the sepals should reflex to expose their inside surface, and to show the corolla out well.
- 5. The anthers should hang conspicuously below the purple, and the pistil below them.
- 6. The flowers of a Fuchsia should come out at the base of every leaf all over the plant, and we have many which do so. Double varieties are monstrosities, and, with a few exceptions, worthless; they lack the simple grace and elegance of the single varieties.

ANTIRRHINUM.

- 1. The plant should be dwarf, the flowers abundant, the mouth wide, and the more the inner surface turns up to hide the tube, the better.
- 2. The tube should be clear and pure if white, and bright if any other color; and the mouth and all the inner surface should be of a different color and texture, and form a contrast with the tube.
 - 3. The petals should lap over at the indentations, so as

not to show them; the texture of the tube should be like wax or enamel; the inside surface, which laps over, should be velvety.

- 4. When the flower is spotted or striped, the marking should be well defined in all its variations; the color should be dense, whatever that color may be.
- 5. The flowers should form spikes of six or seven blooms, close but not in each other's way, and the footstalks should be strong and elastic to keep them from hanging down close to the stem, which they will if the footstalks are weak.

A FINE ROSE.

- 1. The petals should be thick, broad, and smooth at the edges.
- 2. The flower should be highly perfumed, or, as the dealers call it, fragrant.
- 3. The flower should be double to the centre, high in the crown, round in the outline, and regular in the disposition of the petals.

MOSS ROSES.

- 1. The petals should be thick, broad, and smooth at the edges.
- 2. The flower should be highly perfumed, or, as the dealers call it, fragrant.
- 3. The flower should be double to the centre, high in the crown, round in the outline, and regular in the disposition of the petals.
- 4. The quantity of moss, the length of the spines or prickles which form it, and its thickness or closeness on the stems, leaves and calyx, cannot be too great. This being the distinguishing characteristic of Moss Roses, the more strongly it is developed the better.
- 5. The length of the divisions of the calyx, and the ramifications at the end, cannot be too great.

As the entire beauty is in the undeveloped bud, the more the calyx projects beyond the opening flower, or rather the more space it covers, the better.

- 6. The plant should be bushy, the foliage strong, the flowers abundant and not crowded, and the bloom well out of the foliage.
- 7. The color should be bright or dense, as the case may be, and if the color or shade be new, it will be more valuable; and the color must be the same at the back as at the front of the petals.

These seven properties would constitute a Moss Rose a valuable acquisition; and probably at present, the greatest acquisition would be a yellow one.

- 8. The stem should be strong and elastic, the footstalks stiff, so as to hold the flower well up to view, above or beyond its leaves.
 - 9. The bloom should be continuous, like the China roses.

ROSES FOR STANDS,

SHOWING THE SINGLE BLOOM, LIKE DAHLIAS.

- 1. The petals should be thick, broad, and smooth at the edges.
- 2. The flower should be highly perfumed, or, as the dealers call it, fragrant,
- 3. The flower should be double to the centre, high in the crown, round in the outline, and regular in the disposition of the petals.
- 4. That is, the petals should be imbricated, and in distinct rows, whether they are reflexed, like some of the Velvet Tuscan kind, or cupped like a Ranunculus; and the petals to the centre should continue the same form and only be reduced in size.
- 5. The color should be distinct and new, and stand fast against the sun and air till the bloom fails.

- 6. The stem should be strong, the footstalk stiff and elastic; the blooms well out beyond the foliage, and not in each other's way.
- 7. The plant should be shrubby, the foliage a fine green, and growth strong, the flowers abundant.
- 8. The bloom should be continuous, till the frost cuts off the growth altogether.

NOISETTE ROSES.

- 1. The petals should be thick, broad, and smooth at the edges.
- 2. The flower should be highly perfumed, or, as the dealers call it, fragrant.
- 3. The flowers should be double to the centre, high in the crown, round in the outline, and regular in the disposition of the petals.
- 4. The cluster should be sufficiently open to enable all the flowers to bloom freely, and the stems and footstalks should be firm and elastic to hold the flower face upward, or face outward, and not to hang down and show the outside, instead of the inside of the blooms.
- 5. The bloom should be abundant at the end of every shoot.
- 6. The blooming shoots should not exceed twelve inches before they flower.
- 7. The bloom should stand out beyond the foliage, and the plant should be compact and bushy.
- 8. The flowering should be continuous, as long as the plant is unaffected by the frost.

CLIMBING ROSES.

- 1. The petals should be thick, broad, and smooth at the edges.
 - 2. The flowers should be highly perfumed, or, as the

dealers call it, fragrant; except in Prairie roses, where perfume is not essential.

- 3. The flower should be double to the centre, high on the crown, round in the outline, and regular in the disposition of the petals.
- 4. The joints should be short from leaf to leaf. The blooms should come on very short branches, and all up the main shoots. The plant should be always growing and developing its flowers from spring to autumn, except Prairie roses, and the foliage should completely hide all the stems.

SWEET WILLIAM.

- 1. The head of bloom should be large.
- 2. The individual flowers should be round, smooth on the edge, flat on the surface, thick in the petal, and the edges should touch each other without lapping over.
- 3. The color should be pure, free from speckles; if marked, the circles should be well defined.
- 4. The divisions in the petals should not show, and the footstalks of the individual flowers should be long enough to throw them up above the green of the plant itself; there should be not less than nineteen pips or flowers in the truss.
- 5. The double varieties should in every pip form half a ball, and should stand well out, edge to edge, without lapping over.

CARNATION.

- 1. The flower should not be less than two and a half inches across.
- 2. The guard or lower petals, not less than six in number, must be broad, thick, and smooth on the outside, and all the rest, as well as these, must be free from notch or serrature, and lap over each other sufficiently to form a circular roseate flower, the more round the outline the better.
 - 3. Each row of petals should be smaller than the row

immediately under it; there should not be less than five or six rows of petals laid regularly, and the flower should rise and form a good bold centre or crown, and in quantity should form half a ball.

- 4. The petals should be stiff and slightly cupped.
- 5. The ground should be pure or snow white, without specks of color.
- 6. The stripes of color should be clear and distinct, not running into one another, nor confused, but dense, smooth at the edges of the stripes, and well defined.
- 7. The colors must be bright and clear, whatever they may be; if there be two colors, the darker one cannot be too dark, or form too strong a contrast with the lighter. With scarlet, the perfection would be a black; with pink, there cannot be too deep a crimson; with lilac or light purple, the second color cannot be too dark a purple.
- 8. If the colors run into the white and tinge it, or the white is not pure, the fault is very great, and pouncy spots or specks are highly objectionable.
- 9. The pod of the bloom should be long and large to enable the flower to bloom without bursting it, but this is rare; they generally require to be tied about half way, and the upper part of the calyx opened down to the tie of each division; yet there are some which scarcely require any assistance, and this is a very estimable quality.

PICOTEE.

The properties of form are similar to those of the Carnation; but the distinction between Carnations and Picotees is, that the color of the former is disposed in unequal stripes, going from the centre to the outer edges, and that of the Picotees is disposed on the outer edges of the petals and radiates inwards, and the more uniformly this is disposed the better. Whether it be very deeply feathered at the edge.

like the pattern on the edge of a heavy feathered tulip, or an even stripe not wider than the thickness of the petal, all round the edge or something between, it is only necessary that it be uniform; that none of the feathery marks have a break, and that there shall be as much width of white as color seen on the petal at the deepest part of the feather. It is not necessary that the feather be the same width all the way round, but every stripe which does not reach the edge of the petal is a blemish.

DISQUALIFICATIONS OF BLOOM IN BOTH.

- 1. If there be any petal dead or mutilated.
- 2. If there be any one petal in which there is no color.
- 3. If there be any one petal in which there is no white.
- 4. If a pod be split down to the sub-calyx. If a guard petal be badly split.
- 5. Notched edges are glaring faults, for which no excellence in other respects compensates, but they are not absolute disqualifications.

HOLLYHOCK.

- 1. The flower should be round, and the principal or guard petals should be thick, entire on the edges, and lie flat, being free from puckering or frilling.
- 2. The centre, which is composed of florets, should form half a ball, and the more it covers the principal or guard petals the better.
- 3. These florets should be thick, large, whole on the edges, perfectly free from fringe, notch, or raggedness all over.
- 4. The color should be dense instead of watery and transparent or washy, as that of the Hollyhock is generally. The more bright and novel the more desirable.
- 5. The spike should be close, the flowers touching each other, and tapering from the bottom to the top; the foot-

stalks of the flower being larger at the lower end of the spike than at the upper end.

6. There is no fixed height for the plant, but the flowers should begin one foot from the ground, and open all at once.

CALCEOLARIA.

- 1. The plant should be shrubby; the habit bushy; the wood strong; the foliage thick and dark green.
- 2. The flower stem should be short and strong, and the footstalks of the blooms elastic and branching well away from each other, to form a rich mass of flowers—without crowding.
- 3. The individual flower depends entirely on the form of the purse; it should be a perfect round hollow ball; the orifice and calyx cannot be too small, nor the flower too large.
- 4. The color should be very dense; whether the marking be a spot in the middle, or stripes or blotches, it should be well defined; the ground should be all one color, whether white, straw, sulphur, yellow, or any other color.
- 5. The color of a self should be brilliant, and all over of the same actual shade; dark flowers, with pale edges or clouded and indefinite colors, are bad and unfit for show.
- 6. The bloom should form one handsome group of pendent flowers, commencing where the foliage leaves off; the flower stems should not be seen between the foliage and the flowers, which latter should hang gracefully and be close to each other, the branches of the flower stems holding them so as to form a handsome surface.

PANSY OR HEARTSEASE.

- 1. It should be round, flat, and very smooth at the edge, every notch or serrature or unevenness being a blemish.
- 2. The petals should be thick, and of a rich velvety texture, standing out firm and flat without support.

- 3. Whatever may be the colors, the ground color of the three lower petals should be alike: whether it be white, yellow, straw color, plain, fringed or blotched, there should not in these three petals be a shade of difference in the principal color.
- 4. Whatever may be the character of the marks or darker pencillings on the ground color, they should be bright, dense, distinct, and retain their character without running, or flushing, or mixing with the ground color; and the white, yellow or straw color should be pure.
- 5. The two upper petals should be perfectly uniform, whether dark or light or fringed or blotched. The two petals immediately under them should be alike; and the lower petal, as before observed, must have the same ground color and character as the two above it; and the pencilling or marking of the eye in the three lower petals must not break through to the edges.
- 6. In size there is a distinct point, when coarseness does not accompany it; in other words, if flowers are equal in other respects, the larger is the better; but no flower should be shown under one inch and a half across.

GENERAL REMARKS.

Ragged edges, crumpled petals, indentures on the petal, indistinct markings or pencillings, and flushed or run colors, are great blemishes; but if there be one ground color to the lower petal and another color to the side ones, or if there are two shades of ground color at all, it is not a show flower, though many such are improperly tolerated—the yellow within the eye is not considered ground color. In selecting new varieties, not one should be let out which has the lastmentioned blemish, and none should be sold that do not very closely approach the circular four. One of the prevailing faults in the so-called best flowers is the smallness of the centre yellow or white, and the largeness of the eye, which

breaks through it into the border. We are so severe in these matters ourselves, that we count the very best of them no bloom in summing up the good ones; there are few stands of over thirty-six, that contain twelve good show flowers.

HYACINTH.

- 1. Each pip or flower should be round and not ragged.
- 2. The petals should be broad, thick, blunt at the ends, not pointed, and reflexed enough to throw up the centre well.
- 3. The footstalk should be strong, and hold the flower out stiff in a vertical position, that is, facing the spectator, and by no means weak, to allow the pip to hang with the face sloping towards the ground. The footstalks should also be of a length to make the pips touch each other and no more.
- 4. The pips should be large, for, unless the pips be large, they cannot touch each other without very short footstalks, and the flowers would be so close to the stem that the truss itself would be no size.
- 5. Double flowers should have the rows of petals above each other very regularly imbricated, so as to throw up the centre.
- 6. The outer petals, therefore, of a double flower need not reflex and should not reflex so much as a single one, because the centre is raised by the second and third rows of petals.
- 7. The spike should be bold, round, compact, and pyramidal, with a number of flowers at the bottom, gradually diminishing to a single flower at the top.
- 8. The flower stem should be very strong and upright, and no part of it should be seen from the lowest flowers to the top, in consequence of the closeness of the pips to each other.
- 9. The colors should be bright, clear and dense, whatever the shade; and any better approach to scarlet, blue or yel-

low than those shades we now possess, would be highly esteemed; flowers with dark eyes, very clear outsides, and those with striped petals, would be held to be better than selfs in general, but would give no point against form.

TULIP.

- 1. The cup should form, when quite expanded, from half to a third of a hollow ball. To do this, the petals must be six in number; broad at the ends, smooth at the edges, and the divisions between the petals must scarcely show an indenture.
- 2. The three inner petals should set close to the three outer ones, and the whole should be broad enough to allow of the fullest expansion without quartering, as it is called; that is, exhibiting any vacancy between the petals.
- 3. The petals should be thick, smooth, and stiff, and keep their form well.
- 4. The ground should be clear and distinct, whether white or yellow. The least stain, even at the lower end of the petal, would render a Tulip comparatively valueless.
- 5. Roses, byblocms and bizarres are the three classes into which Tulips are now divided. The first have a white ground, and crimson or pink or scarlet marks; the second have white grounds, and purple, lilac or black marks; and the last have yellow grounds, with any colored marks.
- 6. Whatever be the disposition of colors or marks upon a Tulip, all the six petals should be marked alike, and be, therefore, perfectly uniform.
- 7. The feathered flowers should have an even, close feathering all round, and whether narrow or wide, light or heavy, should reach far enough round the petals to form, when they are expanded, an unbroken edging all round.
- 8. If the flower have any marking besides the feathering at the edge, it should be a beam, or bold mark down the

centre, but not reaching the bottom, or near the bottom of the cup; the mark or beam must be similar in all the six petals.

- 9. Flowers not feathered, and with flame only, must have no marks on the edges of the flowers. None of the color must break through to the edge. The color may be disposed in any form, so that it be perfectly uniform in all the petals, and does not go too near the bottom.
- 10. The color, whatever it may be, must be dense and decided; whether it be delicate and light, or bright or dark, it must be distinct in its outline, and not shaded or flushed or broken.
- 11. The height should be eighteen to thirty-six inches; the former is right for the outside row in a bed, and the latter is right for the highest row.
- 12. The purity of the white and the brightness of the yellow should be permanent; that is to say, should stand until the petals actually fall.

DIGITALIS OR FOXGLOVE.

The plant below the flower should be only the same length as the spike of flowers.

- 1. The individual bloom should be as bright outside the tube as it is inside.
- 2. The tube long and large, the mouth wide, the petals thick, and free from notch or serrature in the margin.
- 3. The footstalks strong, that the flowers may stand out from the main stem, and rather droop.
- 4. Contrast in colors is desirable, as affording a greater variety, and the colors always bright and striking, as the great fault of the Digitalis or Foxglove is its dull, heavy, dingy color.

PETUNIA.

- 1. A Petunia should have strong stems, and a close habit; large, thick, round and flat flowers; abundance of bloom, while short and handsome.
- 2. The color or shade is a matter of taste; but such is the fancy of people in these days, that a new, ugly color would be thought more of than an old, handsome one.
- 3. Such is the state of glorious confusion into which botanists have brought things, that when Mr. Tweedie sent home the purple variety, Dr. Hooker called it Salpiglossis integrifolia; Professor Don, Nierembergia phænicia; and Dr. Lindley, Petunia violacea. The green-edged varieties are worthless, and the double varieties are as yet hardly up to the mark as show flowers, though susceptible of great improvement.

VERBENA.

- 1. The flower should be round, without indenture, and no notch or serrature.
 - 2. The petals should be thick, flat, bright and smooth.
- 3. The plant should be compact; the joints short and strong and distinctly of a shrubby habit, or a close ground creeper or a climber; those which partake of all are bad.
- 4. The trusses of bloom should be compact and stand out from the foliage, the flowers touching each other, but not crowding.
- 5. The foliage should be short, broad, bright, and enough of it to hide the stalks.
- 6. In selfs the color should be bright and clear; if white, pure and constant. In striped or variegated varieties the colors must be well defined and the lines of demarkation distinct; blurred, irregular flowers are bad. If eyed, the eye must be well defined, the larger the better; the colors

must never run into each other; the greater the contrast of color the better.

Eyed varieties are not to be considered better than selfs in judging a stand, but, other things being equal, the stand having the greatest number of distinct, well-defined varieties should receive the prize.

TRIS.

This flower is composed of three principal and three secondary petals or divisions. The three principal fall down and the others stand up. A glance at many of the families will soon decide a very important property in some, and deficiency in others—the breadth of the three principal petals. It will occur to the untaught child, that the flower which presents the largest portion of rich surface is the best; all who have grown the common Iris know it has narrow, mean-looking petals; but the kind which has been propagated in England has a broad, rich-looking petal, and upon this feature does the beauty of the Iris turn.

The three principal divisions or petals should be broad enough to touch each other, and form an arch or graceful curve, but described as one third of a hollow ball, or reversed cup, level at the lower edge by reason of the bluntness of the three petals at the outer end, which should form a circular outline on looking down upon them. The three smaller petals should stand up, and be perfectly clear of the three that fall down.

The three lower petals should be of a rich velvety texture, and be thick, smooth on the edges, firm in their places, and, whether self-colored, striped, mottled, shaded, or spotted, the color should be well defined.

The three upper ones should be of a different color, and of a smooth or enamel kind of texture; the greater the contrast of color the better. The Iris is a dwarf plant, and though three petals fall down and three stand up, and the fall of the broad petals is too sudden, and, on looking down on them, they hardly form any recognizable outline, it is capable of being produced with a fall not so sudden, and a curve perfectly graceful; and the great advantage of this will be, that the entire surface may be seen at once, instead of a portion only.

The flowers should open but one at a time, that the beauty of the plant may be prolonged. The flower should be eighteen inches from the ground, and, when full grown and expanded, be four inches across.

LILY.

- 1. The plant should be only as high from the pot to the bottom flower, as it is from the bottom flower to the top one. The leaves should be long and plenty of them at bottom, and gradually shorten and lessen in number as they approach the bottom bloom.
- 2. The individual blooms should be large, and composed of broad petals reflexing in the form of a globe, without separation at the points, or forming gutters or uneven ribs in the petals, but showing a fair, round, even surface, and exhibiting none of the backs of the petals.
- 3. The petals should be thick, rich in texture, free from notches or puckers, of pure ground color or white. The blooms should be on strong footstalks; the lower flower further off the stem than the upper, and these should not be less than seven in the truss or spike, that should form a tapering head of flowers.
- 4. The varieties speckled with the ruby-like spots should be of pure white ground, and the spots bright scarlet; those with pale rosy ground should have black spots, and the more and the larger, the better.

GERANIUM OR PELARGONIUM.

- 1. The petals should be thick, broad, blunt, and smooth at the edges, and slightly cupped.
- 2. The flower should be circular, higher at the edges than in the centre, (so as to form rather a hollow, though by no means a deeply-cupped bloom), without puckering or frilling; and where the petals lap over each other, the indentation caused by the joining should be hardly perceptible.
- 3. The petals should lie close on each other, so as to appear a whole flower rather than a five-petalled flower.
- 4. The stem should be straight, strong, elastic, carrying the blooms well above the foliage. The footstalks of the individual flowers should be stiff, and of sufficient length to allow the flowers to show themselves in an even head, fitting compactly edge to edge, and forming a uniform bold truss.
- 5. The color should be bright and dense, whether it be scarlet, crimson, rose color, purple, lilac, or any of the modifications; the spots on the upper petals should be boldly contrasted with the ground, and the darker the better; both upper petals should be alike, both side petals alike, and the lower petals uniform.
- 6. All white grounds should be very pure; and the colors, no matter what they be, in the white, should be decided, well defined, and by no means flush into the white.
- 7. The spots on the upper petals, or the marks in any other, should not break through to the edge.
- 8. Colors being a matter of taste, do not affect the real properties so much as other points, unless it be on the score of novelty; on this ground a bright scarlet would be desirable and a black spot. We have plenty of approaches to both, but none very near.
- 9. The plant should be shrubby in its habit, the foliage close and of a rich bright green, the joints short and strong,

able to support themselves in every part without assistance. The flowers should be large, not less than five in a truss, and come at the end of every shoot.

DAHLIA.

- 1. The flower should be a perfect circle when viewed in front; the petals should be broad at the ends, smooth at the edges, thick in substance, perfectly free from indenture or point, and stiff to hold their form; the flower should cup a little, but not enough to show the under surface. They should be in regular rows, forming an outline of a perfect circle, without any vacancy between them, and all in the circle should be the same size, uniformly opened to the same shape, and not crumpled.
- 2. The flower should form two thirds of a ball when looked at sideways. The row of petals should rise one above another, symmetrically; every petal should cover the joining of the two petals under it—what the florists call imbricating, by which means the circular appearance is perfected throughout.
- 3. The centre should be perfect; the unbloomed petals, laying with their points towards the centre, should form a button, and should be the highest part of the flower, completing the ball.
- 4. The flower should be symmetrical. The petals should open boldly, without showing their under side, even when half opened, and should form circular rows uniformly laid, evenly opened, and enlarging by degrees to the outer row of all.
- 5. The flowers should be very double. The rows of petals lying one above another should cover one another very nearly; not more should be seen in depth than half the breadth; the more they are covered, so as to leave them distinct, the better in that respect; the petals therefore, though cupped, must be shallow.

- 6. The size of the flower, when well grown, should be four inches diameter, and not more than six.
- 7. The color should be dense, whatever it be, not as if it were a white dipped in color, but as if the whole flower was colored throughout. Whether tipped or edged it must be free from splashes or blotches, or indefinite marks of any kind; and new flowers, unless they are superior to all old ones of the same color, or are of a novel color themselves, with a majority of the points of excellence, should be rejected.

RHODODENDRON.

- 1. The flower should be circular, and campanulated or hollow like a globular cup.
- 2. The five divisions of the petal should be concealed by means of the lapping over, and they should be large.
- 3. The petal should be thick, smooth at the edge, stiff, and hold its shape well.
- 4. The truss of blooms should be pyramidal or domeshaped, stand clear of the foliage, the flower compact, touching but not crowding each other.
 - 5. The footstalks should be stiff and elastic.
- 6. The color should be brilliant, the spots distinct and contrasted, and stand well without fading.
- 7. The plant should be bushy, the foliage bright clear green, large, and disposed all round the branch, especially round the flower.
- 8. The stems should be well covered with leaves, and the bloom should be abundant.
- 9. It should not bloom until the middle of June if hardy, as, by beginning before the frosts have gone, the blooms are always spoiled.

The following would be considered great faults:—The petals pointed, thin, notchy, frilled, or crumpled; the divisions narrow, the flowers loose in the truss, the footstalks

weak and too long, the color dull, the spots not bold nor strong; the foliage narrow, dull, and far apart; the habit lanky; plant straggling and ugly.

PINK.

The properties of the pink, so far as form, substance, and some other particular features are concerned, should be the same as those of the Carnation and Picotee.

- 1. The flower should be circular, and rise like half a ball.
- 2. The petals should be thick, broad, smooth at the edges, without notch or serrature, regularly disposed, and each row smaller than that immediately under it.
- 3. The ground should be pure white; and the color, whatever it may be, from rose color to dark red, or from lilac to dark purple approaching black, should reach from the inside of the petal far enough outwards to show in front beyond the petals above it, and form a rich eye.
- 4. A narrow, plain, even lacing or stripe of the color should appear inside the white edge, which should be just the same width outside the lacing as the lacing itself is, and as even.
- 5. There should be no break or vacancy in the lacing, and the color inside of the petal ought, as well as the lacing, to be well defined, forming a circular colored eye or centre to each row of petals.
- 6. Self-colored petals, split petals, and split pods are disqualifications. Notched or saw-like edges, broken or imperfect lacing, specks or foul marks on the white, thinness or flimsiness of texture, looseness of construction or deficiency of petals, are glaring faults.
- 7. In a general way, in all other respects but the size and coloring, the properties of the Pink should be similar to those of the Carnation and Picotee; and no Pink ought to be less than two inches in diameter.

PHLOX.

- 1. Every individual bloom should be perfectly round and flat, without notch, division, or serrature.
 - 2. The petals should be thick and smooth.
- 3. The individual flowers, by their number, form a good head or truss touching each other, rising in the centre and not confused.
- 4. The color should be dense and pure; if white or yellow or straw or cream color, it should be decided and all over alike; if striped or spotted, the marking should be uniform and well defined.
- 5. The individual blooms should be large, and the truss proportionally so; though size counts for nothing if the other properties are deficient.
- 6. The plant should be dwarf and branching, and the flowers numerous, so as to cover it completely when it blooms.

PÆONY.

- 1. The petals should be thick, broad, and smooth at the edges.
- 2. The flowers should be large, double, round outline and face, symmetrical and abundant.
- 3. The foliage should be small, the stems strong, and the bloom stand up boldly, and by no means hang down.
 - 4. The color should be dense and decided.

AMARYLLIS.

The flower ought to open Convolvulus-fashion, and have no indentations or divisions; this brings us to a very good test,—the less division there is the better. The truss, or bunch of flowers, ought to consist of five.

The flowers ought to be very thick, very smooth at the

edge, of a velvety texture inside, and of a dense color, without any touch of green.

The most perfect in these respects, though the most awkward and ill formed, is formosissimus, the flowers of which are of a deep crimson velvety texture, rich in the extreme; but there appears to be little affinity between that plant and the gay subjects of the present notice.

AZALEA INDICA.

The flower should be round, composed of five divisions, though only one petal; and the indentures, where they join, should be so small as not to materially interrupt the circle.

- 2. The petal should be thick, and of course, to be round, the ends of the divided portions should be blunt, lap over each other, and be free from notch, serrature or blemish.
- 3. The flower should be large and slightly cupped; the color should be distinct, dense, and, if a self, alike in all the petals, or rather the divisions.
- 4. If variegated, the colors should be distinct, and if spotted, the spots should be so much darker than the other color as to form a strong contrast.
- 5. The leaf should be bright green, the plant shrubby, the wood or stems strong to stand without support, and short to form a compact bush.

GERMAN ASTER.

The flower should be double, high in the crown, round, without disk or confusion in the centre, of the form of half a ball. The petals should be broad, thick, smooth, round at the ends, according with the circle of the flower and the indentations, well covered where they meet.

In the pacony-flowered varieties the petals must not show their under side by quilling, but must lie smooth and firm in their places. In the quilled varieties the quilling must be dense and regular, rising in the form of half a ball from the disk, which in this variety should exist and be composed of broad, stiff, rounded petals forming the circle of the flower. The quills should be of uniform length and well opened.

Color in all varieties bright and clear, variegations well defined; if a self, bright; if white, pure.

Size is a merit, but is the last point to be considered.

Asters should be shown as *single blooms* or *plants*, as in the pyramidal and dwarf varieties, where the beauty of the variety is the mass of flowers; but these different modes of exhibition should never be allowed to come into competition with each other.

Where plants are shown the foliage should be bright and perfect.

Insect cuttings disqualify a flower.

The stem should be strong and firm and well support the flower.

BALSAM.

These plants should be shown in spikes. Single varieties disqualify a stand. The stalk should be stout, firm and erect, well clothed with dark green, short, stiff foliage, but not so thick as to hide the bloom.

The flowers should be large, round, cup-shaped, imbricate. Spur short; peduncle short and stiff, holding the flower close to the stalk.

The flowers should be expanded at least on two thirds of the stalk.

Color should be bright and pure; in mottled, spotted, striped or shaded varieties, the contrasts should be well defined and the variegations clear. Flabby leaves and flowers disqualify a stand.

GILLYFLOWER OR STOCK.

This plant should be shown in spikes. The foliage (if any) should be bright, shining or glaucous green, stiff and firm. Flowers thickly disposed on all sides of the spike, but not crowded. Form of flower globular, and as near a circle as possible. Petals evenly arranged, of good substance. Colors clear and well defined.

Green in the centre disqualifies a flower.

When shown as plants, long leafless shoots are inadmissible: the foliage should be dense and healthy.

Side shoots should not be longer than the main stem. In fact, the plant should be pyramidal.

The tall varieties may, however, show a clear stem with a dense bushy head of leaves and flowers, but even with these, bushy plants are more elegant. These remarks apply also to Wall Flowers.



INDEX.

Amaryllis,	30	Gloxinia,	7
Antirrhinum,	11	Hollyhock,	17
Aquilegia,	6	Hyacinth,	20
Azalea Indica,	31	Iris,	24
Balsam,	32	Lily,	25
Begonia,	5	Pæony,	30
Bouquets,	4	Pansy or Heartsease,	18
Calceolaria,	18	Petunia,	23
Camellia Japonica,	9	Phlox,	30
Cape Heaths,	8	Picotee,	16
Carnation,	15	Pink,	29
Chrysanthemum,	10 .	Pot Plants,	4
Cineraria,	9	Rhododendron, .	28
Dahlia,	27	Roses,	12
Delphinium,	6	" Moss,	12
Digitalis or Foxglove, .	22	" for Stands, .	13
Double Zinnia Elegans, .	- 7	" Noisette, .	14
Epacris,	5	" Climbing, .	14
Fuchsia,	10	Sweet William, .	15
German Aster,	31	Tropæolum,	5
Geranium or Pelargonium,	26	Tulip,	21
Gillyflower or Stock, .	33	Verbena,	23
Gladiolus,	6		





